How to Administer Intramuscular and Subcutaneous Vaccine Injections to Adults

Intramuscular (IM) Injections

Administer these vaccines via IM route

- Haemophilus influenzae type b (Hib)
- Hepatitis A (HepA)
- Hepatitis B (HepB)
- Human papillomavirus (HPV)
- Influenza vaccine, injectable (IIV)
- Influenza vaccine, recombinant (RIV3; RIV4)
- Meningococcal conjugate (MenACWY)
- Meningococcal serogroup B (MenB)
- Pneumococcal conjugate (PCV13)
- Pneumococcal polysaccharide (PPSV23) may also be given Subcut
- Polio (IPV) may also be given Subcut
- Tetanus, diphtheria (Td), or with pertussis (Tdap)
- Zoster, recombinant (RZV; Shingrix)

Injection site

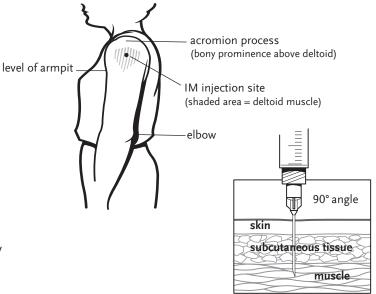
Give in the central and thickest portion of the deltoid muscle – above the level of the armpit and approximately 2–3 fingerbreadths (~2") below the acromion process. See the diagram. To avoid causing an injury, do not inject too high (near the acromion process) or too low.

Needle size

22-25 gauge, 1-11/2" needle (see note at right)

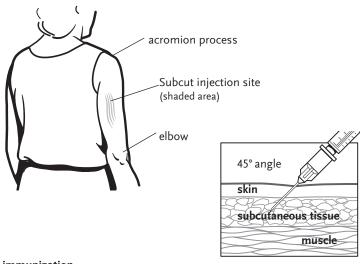
Needle insertion

- Use a needle long enough to reach deep into the muscle.
- Insert the needle at a 90° angle to the skin with a quick thrust.
- Separate two injections given in the same deltoid muscle by a minimum of 1".



Note: A $\frac{5}{8}$ " needle is sufficient in adults weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle **only** if the subcutaneous tissue is not bunched and the injection is made at a 90° angle; a 1" needle is sufficient in adults weighing 130–152 lbs (60–70 kg); a $1-1\frac{1}{2}$ " needle is recommended in women weighing 153–200 lbs (70–90 kg) and men weighing 153–260 lbs (70–118 kg); a $1\frac{1}{2}$ " needle is recommended in women weighing more than 200 lbs (91 kg) or men weighing more than 260 lbs (more than 118 kg).

Subcutaneous (Subcut) Injections



Administer these vaccines via Subcut route

- Measles, mumps, rubella (MMR)
- Pneumococcal polysaccharide (PPSV23) may also be given IM
- Polio (IPV) may also be given IM
- Varicella (Var; chickenpox)
- Zoster, live (ZVL; Zostavax)

Injection site

Give in fatty tissue over the triceps. See the diagram.

Needle size

23-25 gauge, 5/8" needle

Needle insertion

- Pinch up on the tissue to prevent injection into the muscle. Insert the needle at a 45° angle to the skin.
- Separate two injections given in the same area of fatty tissue by a minimum of 1".



Technical content reviewed by the Centers for Disease Control and Prevention

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